

the extent of physical fitness, the progress of pharmacological therapies or the progress of oxygen-therapy, the method comprising:

(a) obtaining a volume of an end expiratory gas mixture from an animal or a human,

(b) determining the amount of one or more gases contained within said volume,

(c) recording of the value thus obtained in step (b), optionally together with time data and individual data,

(d) comparing values from step (c) with a table of values, and

(e) generating a signal according to the comparing of values in step (d), said signal being stored or optionally being processed and/or edited.

19. The method according to claim 18, wherein the gas determined in step (b) is at least one gas selected from the group consisting of CO₂ and O₂.

20. The method according to claim 18, wherein the amount of the at least one gas in the end expiratory gas mixture is optically determined.

21. The method according to claim 20, wherein the method is for predicting ovulation and the at least one gas is CO₂.

22. The method according to claim 18, wherein stored measured data are compared with already stored data by a program, wherein detection of a deviation from a predetermined value provides the signal.

23. A device for the determination of the partial pressure of at least one gas in an end expiratory mixture of gases from an animal or a human or for predicting ovulation, the device comprising:

(a) a receiving unit for receiving a gas volume of end expiratory gas from an animal or a human,

(b) at least one measuring device for the determination of the at least one gas in the end expiratory gas volume received in the receiving unit, and for the generation of measurement signals, and

(c) a unit for display and/or storage and evaluation for recording and processing of signals received from the at least one measuring device, wherein the measured values therefrom are stored together with individual data of the animal or human being monitored.

24. The device according to claim 23, which further comprises an optical measuring unit to determine the IR absorption of CO₂, wherein the measuring unit provides a signal that is stored together with time data or the identity of the animal or human, in a memory.

25. The device according to claim 23, wherein the optical measuring unit is an IR measuring cell.

26. The device according to claim 23, which further comprises an oxygen sensor.

27. The device according to claim 23, which further comprises a device to absorb water from the end expiratory gas.

28. The device according to claim 23, which further comprises a portable energy source.

IN THE ABSTRACT:

Please replace the ABSTRACT with the ABSTRACT OF THE DISCLOSURE attached hereto.